

I claim:

ADD A1

- 1 1 A geometric reconfiguration assembly for a natural heart, comprising:
- 2 a collar configured for surrounding the natural heart and having a plurality of
- 3 bands in a spaced relationship; and
- 4 a connector bar intersecting the plurality of bands and configured for
- 5 maintaining the spaced relationship of the bands to each other
- 1 2. The assembly of claim 1, wherein the connector bar comprises an inner surface
- 2 having an outwardly convex curved configuration.
- 1 3. The assembly of claim 1, wherein each of the plurality of bands are positioned
- 2 parallel to each other.
- 1 4. The assembly of claim 1, wherein the assembly comprises from about 2 to about 10
- 2 bands.
- 1 5. The assembly of claim 1, wherein the bands comprise a high strength, high modulus
- 2 polymer.
- 1 6. The assembly of claim 1, wherein the bands comprise a metal.
- 1 7. The assembly of claim 1, wherein the connector bar is positioned tangential to the
- 2 plurality of bands.
- 1 8. The assembly of claim 1, wherein at least one of the bands has a thickness of about .2
- 2 mm.

10054066-01202
202210-0904500T

10054068-012202

- 1 9. The assembly of claim 1, wherein each of the bands includes a thickness, and the
2 connector bar comprises a plurality of grooves configured to receive the thickness of
3 each of the plurality of bands.
- 1 10. The assembly of claim 9, wherein the connector bar comprises at least one beveled
2 groove.
- 1 11. The assembly of claim 1, wherein the connector bar comprises a cushioned portion.
- 1 12. The assembly of claim 1, comprises a closure device for enclosing at least one of the
2 bands in the connector bar.
- 1 13. The assembly of claim 1, wherein the collar comprises a first restrictor region
2 configured to be positioned adjacent the anterolateral surface of the heart and a
3 second restrictor region configured to be positioned adjacent posteromedial surface of
4 the heart.
- 1 14. The assembly of claim 11, wherein the cushion portion comprises a polymeric
2 material.
- 1 15. The assembly of claim 1, wherein said assembly comprises a pad provided adjacent
2 the inner surface of the connector bar.
- 1 16. The assembly of claim 15, wherein the pad comprises a low durometer polymer.
- 1 17. The assembly of claim 15, wherein the pad comprises a cushion.
- 1 18. The device of claim 17, wherein the cushion comprises a gel-filled cushion.
- 1 19. The assembly of claim 17, wherein the cushion comprises a fluid-filled cushion.

- 1 20. A geometric reconfiguration assembly for a natural heart, comprising;
- 2 a collar for surrounding a portion of the natural heart, said collar having a
- 3 portion configured for placement on the basal portion of the natural heart in
- 4 between the left and right pulmonary veins, said collar further comprising an
- 5 attachment assembly configured for releasably connecting said collar together.
- 1 21. The assembly of claim 20, wherein the collar comprises an inner surface having a
- 2 outwardly convex curve configuration.
- 1 22. The assembly of claim 20, wherein the attachment system comprises a pin and
- 2 receptacle, said pin and receptacle being releasably detachable.
- 1 23. A geometric reconfiguration assembly for a natural heart, comprising
- 2 a collar configured for surrounding the natural heart, said collar having a first
- 3 restrictor region for placement adjacent the anterolateral surface of the heart,
- 4 and a second restrictor region configured for positioning adjacent the
- 5 posteromedial surface of the heart; the first and second restrictor portions each
- 6 comprising a plurality of bands in a space relationship and a connector bar
- 7 intersecting the plurality of band and configured for maintaining the space
- 8 relationship of the bands to each other.
- 1 24. The assembly of claim 23, wherein the collar comprises a first and second connector
- 2 portion configured for placement adjacent the basal portion of the heart and a second
- 3 connector portion configured for a position adjacent the apical portion of the
- 4 epicardium of the heart.

- 1 25. A method for reducing wall tension on one of the chambers of the heart, comprising
2 the steps of
3 providing a geometric reconfiguration assembly; and
4 surrounding one of the chambers of the heart with a geometric configuration
5 assembly.
- 1 26. The method of claim 25, comprising the step of occluding blood inflow into the heart
2 prior to placement of the assembly around the chamber of the heart.

202210" 8904500F